International Journal of Modern Trends in Engineering and Research
www.ijmter.com
e-ISSN No.:2349-9745, Date: 2-4 July, 2015

Android Application using GPS Navigation

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Abstract-Mobile phone has become a powerful platform for communication among people. It is now a necessary part of day-today life for many people. Now the mobile computing applications are on the rise, based on the user's daily life. In those emerging applications, everyone needs a helping hand which will be helpful in emergency case and distance tracking. We propose architecture of Help24/7 system that is able to call nearest hospitals, police station and forward call to them until we get response. The system keeps us connected when we are in crowd. This application alerts to all when someone goes apart from group members.
Keywords-Android, LBS, GPS.

I. INTRODUCTION

During the last decades, the total number of vehicles in our roads has experienced a great extent of growth, making traffic density higher. The instant effect of this situation is the dramatic increase of traffic accidents on the road. Tourism is the strongest and largest industry in the world. People go different places for tours where crowd is the main factor. In crowd there are strong chances of losing our dearer ones. A problem is shown that people are not able to stay connected with their group members in crowdie places. Therefore, we intend to explore how to connect with our group members in crowd and how we can get help from concern authorities in case of emergency.

It has played a significant role in connecting people and helping inemergency. In the traditional emergency services, people take help from only the police station, hospitals and fire brigade whose numbers are saved in their mobile. The poor situation of the real-time performance failed to help people's growing demand. The emergence of the Internet makes up for this shortfall. But most people use personal computer to access Internet, they cannot get information anywhere and anytime. Hence people need intelligent, personalized and user oriented mobile information services to solve the problem.

The prevalence of mobile phones and the pervasiveness of the wireless networks make mobile a promising platform for personal ubiquitous computing. Current mobile services are enhanced with location-aware features, providing the better use experience. Location-based services answer location-related queries, like obtaining local information (traffic condition, navigation messages and so on) and neighboring environment queries, such as finding the nearest hospital or hotel. We will report the design, implementation and deployment of a location-based application, named Help 24/7, with an android phone as a platform. This application will be helpful to the user anytime and anywhere. In particular, the emergency data could be browsed or queried through an Internet map service such as Google Maps. The mobile client's current location is one of the most important information for location based system. Mobile phones need to report their own locations to the remote server repeatedly, so that the information they want can be suitably reported. The simplest method of locating is to let user use GPS.

II. LITERATURE SURVEY

Location based service (LBS) is emerging as a killer application in mobile data services. There is the rapid development in wireless communication and location positioning technologies. End user with location-aware wireless devices can query about their surroundings at any place, at anytime. A location-based service (LBS) is a mobile application that is dependent on the location of a mobile device, like mobile phone or tablet. This will help us in our application to find the exact position of the place where the problem is occurred.

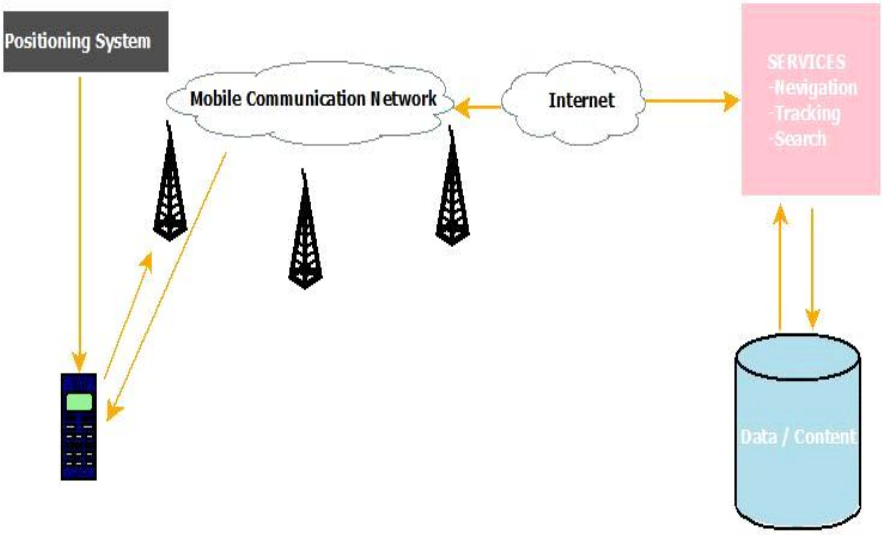

Figure 1: LBS components and Service Process

2.1 Different Existing Applications

2.1.1 VithU

- At the click of the power button of our smartphone two times consecutively, it begins sending out alert messages every 2 minutes to your contacts that you feed into the app as the designated receivers or guardians.
- The message says "I am in trouble. I need help. Please follow my location".
- It will send only messages, but it is not the case that every time we will check out our messages.

2.1.2 ICE: Emergency Contact

- It helps people who have problem or who are victim of accidents. It consists of contact list who is named "ICE" in your contact list. This contact has medical information about you.
- Thus, with only one click on your screen, send alert message to all your saved contacts and call rescue workers immediately. Your contacts will come to know about your location and will be able to help you.

  This will also send only messages, but it is not the case that every time we will check out our messages.

III. PROPOSED SYSTEM

To overcome the drawbacks of existing systems, there is a need to develop a new application. Proposed system will work in two modules:

- **In emergency domain**, the system will trace the nearby hospital/police station. According to the domain, the call will be forwarded to the concerned authority until the call gets responded.
- **In Stay Connected domain**, the user will set a specific distance. According to the domain, the system will alert the user if separated out of distance.

The proposed system will be advantageous in –

- This will helps people who have problem or who are victim of accidents.
- This application is also useful to the people who lost their dearer one in crowdie places.
- Due to this, other emergency cases will also be handled.
- People will also get connected to the Authorities immediately and will get help in few minutes

IV. SYSTEM FLOW

The system consists of two modules:

1. Client
2. Server

4.1 Client

There are two types of client. They are:

1. End user

End user will use this application in case of emergency and this application will find out the current location of the end user.

2. Registered User

Registered users are the users who belong to fields such as hospital, police station and fire brigade .This application alert these registered users when end users need help in emergency.

4.2 Server

In server side we use MYSQL database for storing all information. We use MYSQL database because MYSQL is platform independent & freeware database. It is open source database.

The Architecture of this proposed system is as follows:

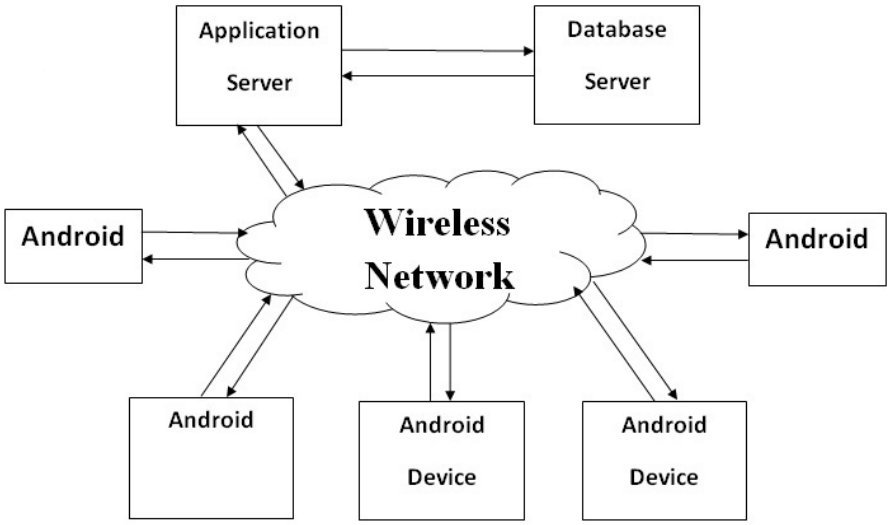

Figure 2: System Architecture of Help24/7

V. ADVANTAGES AND DISADVANTAGES

5.1 Advantages of Proposed System

1. It is helping hand when anyone needs help in emergency.
2. It will keep people connected using alerts in crowdie places.
3. It is very convenient for user and easy to access.
4. It forwards call to concern authority until gets responded.

5.2 Limitations of Proposed System

1. May not track accurate location due to limitations of GPS.

ACKNOWLEDGEMENT

We would like express gratitude to all the persons who have been of the help and assisted us especially thanks to Mr. Pawan R. Bhaladhare, Associate Professor and Head of Department, Dept. of Information Technology, S.N.J.B College of Engineering, Chandwad, Nasik. This work would not have been possible without the enthusiastic response, insight and new ideas from him.

CONCLUSION

The system will play the vital role for helping the people in emergency. This will help people for getting proper help in unknown city also. It will keep people connected in crowdie areas. So it will make people to feel safe in crowd and also in emergency situation. The application is based on location based services and it uses GPS for providing location to the application. By creating a mobile application, it will be easy to use this application by common man also.

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